Test Procedure for the NCP348G Evaluation Board

ON Semiconductor®

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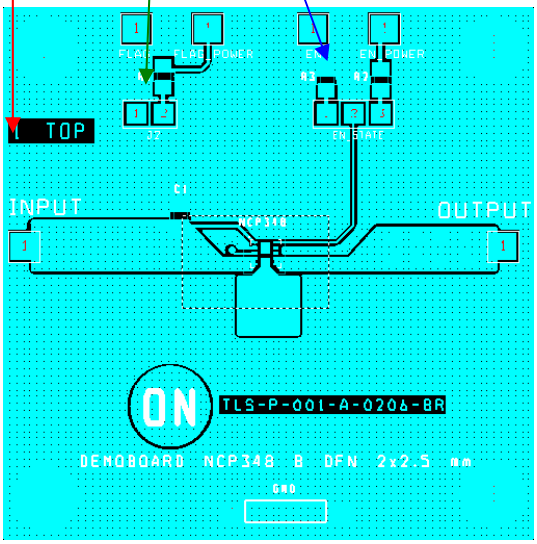
Equipment

0-7V, 2A supply.
5V supply. (Low current)
2.5 ohms / 10W resistor (minimum 10 W)
Multimeter.

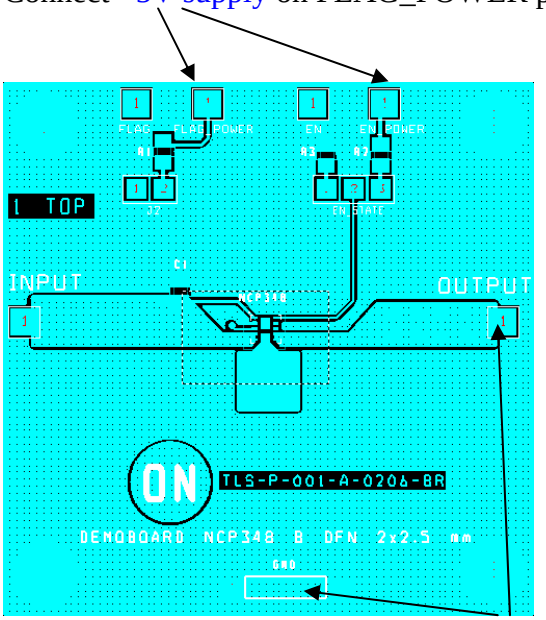
Test Procedure

Setup

* Connect VIN supply between Vin and GND: set to 0V
* Connect J2 shunt
* Connect EN-state shunt on the left hand



Connect +5V supply on FLAG_POWER pin and EN_POWER pin. (use same supply)



Connect 2.5 ohms load between Vout and GND.

Part 1

1. Set VIN supply at 0.5V. Check Flag level = + 5V on FLAG pin.
2. Set VIN supply at 1.2V. Check Flag level = + 0V on FLAG pin. Check Vout=0V

3. Set Vin supply = 3.0V. Measure Vin supply current consumption. (Typical 70µA. Max 100 µA). Check Vout = 0 V

4. Set Vin supply = 5V. Measure Vin supply current (around 2A)
5. Measure Voltage between Vin and Vout test points. Calculate Rdson to check solder. Rdson= (Vin-Vout)/I vin. (typical 70m ohms. Max 120 mohms)
6. Disconnect output load. Check Vout level. Vin = Vout = 5V. Check Flag level = 5 V

7. Measure current consumption. Typical 170µA. Max 300µA.

Part 2


EN_state

1. Put EN_state shunt to right hand.
   Measure Vout = 0V, FLAG level= +5V


EN_state

2. Put EN_state shunt to left hand.
3. Set Vin = 7V.
   Measure Vout = 0V, Check FLAG level = 0 V

Turn Off

1. Decrease Vin level =0V.
2. Disconnect EN and FLAG supply.
3. Disconnect Vin supply.